

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An apparatus for providing a driving signal to an organic light emitting diode in an image display device, comprising:

first and second control lines for transferring previous and current control signals, respectively, in a sequential process for providing the driving signal to the organic light emitting diode;

a data line for transferring a data signal for displaying images on the image display device;

a first switching device including a conduction path for transferring the data signal from the data line, the conduction path of the first switching device being controlled by the current control signal from the second control line;

a second switching device including a conduction path for transferring a reference signal externally supplied, the conduction path of the second switching device being controlled by the previous control signal from the first control line;

a third switching device including a conduction path for transferring the data signal provided from the first switching device, the conduction path of the third switching device being controlled by a state of the second switching device; and

a fourth switching device including a conduction path for ~~receiving~~transferring a bias voltage, ~~and generating the driving signal to the organic light emitting diode,~~ the conduction path of the fourth switching device being controlled by one of the reference

signal from the second switching device and the data signal from the third switching device; and

a fifth switching device including a conduction path for receiving a bias voltage from the fourth switching device and generating the driving signal to the organic light emitting diode, the conduction path being controlled by the previous gate signal from the first gate line.

2. (Original) The apparatus of claim 1, wherein the third and fourth switching devices have switching characteristics substantially identical to each other.

3. (Original) The apparatus of claim 2, further including a capacitor for being charged with the bias voltage and for providing a voltage signal to control the conduction path of the third switching device.

4. (Original) The apparatus of claim 3, wherein the first, second, third and fourth switching devices are first, second, third and fourth thin film transistors, respectively, each having a conduction path between a source and a drain and a gate for receiving a control signal to control the conduction path; the first and second control signal lines are first and second gate lines, respectively; and the previous and current control signals are previous and current gate signals, respectively.

5. (Original) The apparatus of claim 4, wherein the first, second, third and fourth thin film transistors are polysilicon thin film transistors.

6. (Currently Amended) The apparatus of claim 4, wherein the first thin film transistor has a gate to which the current gate signal is applied from the second gate line and a source and a drain to form the conduction path for transferring the data signal; the second thin film transistor has a gate to which the previous gate signal is applied from the first gate line and a source and a drain to form the conduction path for transferring the reference signal; the third thin film transistor has a gate to which the voltage signal from the capacitor is applied and a source and a drain to form the conduction path for transferring the data signal; and the fourth thin film transistor has a gate to which one of the reference signal from the second thin film transistor and the data signal from the third thin film transistor is applied and a source and a drain to form the conduction path between the bias voltage and the ~~organic light emitting diode~~ fifth switching device.

7. (Original) The apparatus of claim 6, wherein the conduction path of the second thin film transistor and the conduction path of the third thin film transistor are connected to the gate of the fourth thin film transistor and are parallel to each other with respect to the gate of the fourth thin film transistor.

8. (Original) The apparatus of claim 6, wherein the gate of the third thin film transistor is connected with the gate of the fourth thin film transistor.

9. (Original) The apparatus of claim 6, wherein the third and fourth thin film transistors have a substantially identical threshold voltage.

10. (Original) The apparatus of claim 9, wherein the threshold voltage of the third and fourth thin film transistors has a negative value.

11. (Original) The apparatus of claim 6, wherein the first and second thin film transistors are N-type thin film transistors, and the third and fourth thin film transistors are P-type thin film transistors.

12. (Currently Amended) The apparatus of claim 11, wherein the voltage of the reference voltage signal is equal to or larger than a gate-off voltage of the first thin film transistor and is equal to or less than a sum of a threshold voltage of the third thin film transistor and a minimum voltage value of the data signal.

13. (Original) The apparatus of claim 6, wherein an effective gate-source voltage of the fourth thin film transistor is dependent on the bias voltage and the data signal and independent of a threshold voltage of the fourth thin film transistor.

14. (Original) The apparatus of claim 6, wherein the bias voltage is provided from a power supply line disposed substantially parallel with the data line.

15. (Currently Amended) The apparatus of claim 6, ~~further including wherein the~~ fifth switching device is a fifth thin film transistor having a conduction path between a source and a drain and a gate for receiving a control signal to control the conduction path,

wherein the conducting path is a fifth thin film transistor having a conduction path between the fourth thin film transistor and the organic light emitting diode, the conduction path being controlled by the previous gate signal from the first gate line.

16. (Original) The apparatus of claim 15, wherein the fifth thin film transistor is a P-type thin film transistor having a source and a drain forming the conduction path and a gate receiving the previous gate signal.

17. (Original) The apparatus of claim 6, wherein the source of the second thin film transistor is connected with the second gate line, so that the conduction path of the second thin film transistor transfers the current gate signal to the fourth thin film transistor as the reference signal.

18. (Original) The apparatus of claim 6, wherein the bias voltage is provided from a power supply line disposed substantially parallel with the first and second gate lines.

19. (Original) The apparatus of claim 18, further including a fifth thin film transistor having a conduction path between the fourth thin film transistor and the organic light emitting diode, the conduction path being controlled by the current gate signal from the second gate line.

20. (Original) The apparatus of claim 19, wherein the fifth thin film transistor is a P-type thin film transistor having a source and a drain forming the conduction path and a gate receiving the current gate signal.

21. (Original) The apparatus of claim 18, further including:

a fifth thin film transistor having a conduction path for transferring the driving signal from the fourth thin film transistor, the conduction path being controlled by the previous gate signal from the first gate line; and

a sixth thin film transistor having a conduction path for transferring the driving signal from the fifth thin film transistor to the organic light emitting diode, the conduction path of the sixth thin film transistor being controlled by the current gate signal from the second gate line.

22. (Original) The apparatus of claim 21, wherein the fifth thin film transistor is a P-type thin film transistor having a source and a drain forming the conduction path for transferring the driving signal from the fourth thin film transistor and a gate receiving the previous gate signal, and the sixth thin film transistor is an N-type thin film transistor having a source and a drain forming the conduction path for transferring the driving signal from the fifth thin film transistor and a gate receiving the current gate signal.

23. (Currently Amended) The apparatus of claim 6, further comprising a fifth thin film transistor having a conduction path between the fourth thin film transistor and

the organic light emitting diode, the conduction path being controlled by the previous gate signal from the first gate line,

wherein the first, second, third and fourth thin film transistors are P-type thin film transistors, and the fifth thin film transistor is an N-type thin film transistor.

24. (Original) The apparatus of claim 23, wherein the reference voltage is larger than a gate-off voltage of the first thin film transistor.

25. (Original) The apparatus of claim 24, wherein the reference voltage is smaller than a sum of a threshold voltage of the third thin film transistor and a minimum voltage value of the data signal.

26. (Currently Amended) An organic light emitting display device comprising:

a plurality of gate lines to which an active gate line is sequentially supplied;

a plurality of data lines to which data signals are applied to display images on the organic light emitting display device; and

a plurality of pixel driving units each of which provides a driving signal to a corresponding OLE diode in association with a pair of the gate lines and at least one of the plurality of a pair of the data lines, wherein each of the pixel driving units includes:

a first driving transistor having a conduction path with one terminal receiving a bias voltage and the other terminal providing the driving signal bias voltage to the diode a second driving transistor, wherein the second driving

transistor has a conduction path with one terminal receiving the bias voltage and the other terminal providing the driving signal to the diode;

a first switching transistor having a conduction path for transferring a reference signal, the conduction path of the first switching transistor being controlled by a previous gate signal; and

a second switching transistor having a conduction path for transferring a data signal, the conduction path of the second switching transistor being controlled by a state of the first switching transistor,

wherein the conduction path of the first driving transistor is controlled by one of the reference signal from the first switching transistor and the data signal from second switching transistor.

27. (Original) The organic light emitting display device of claim 26, wherein a plurality of gate lines including a dummy gate line for providing a gate signal to the first switching transistor of a first one of the pixel driving units.

28. (Original) The organic light emitting display device of claim 27, wherein the dummy gate line is synchronized with a last one of the gate lines.

29. (Original) The organic light emitting display device of claim 27, wherein a same gate signal is applied to the dummy gate line and a last one of the gate lines simultaneously.

30. (Original) The organic light emitting display device of claim 26, wherein each of the pixel driving units further includes a third switching transistor having a conduction path for transferring the data signal from a corresponding one of the data lines to the second switching transistor, the conduction path of the third switching transistor being controlled by the current gate signal.

31. (Currently Amended) The organic light emitting display device of claim 26, wherein the first driving transistor and the second switching transistor have a substantially identical threshold voltage.

32. (Original) The organic light emitting display device of claim 26, further including a plurality of power supply lines each of which is associated with a corresponding one of the pixel driving units for providing the bias voltage to the corresponding pixel driving unit, wherein the power supply lines are parallel with the data lines.

33. (Original) The organic light emitting display device of claim 26, further including a plurality of power supply lines each of which is associated with a corresponding one of the pixel driving units for providing the bias voltage to the corresponding pixel driving unit, wherein the power supply lines are parallel with the gate lines.

34. (Currently Amended) The organic light emitting display device of claim 26, wherein the first driving transistor, and first and second switching transistors are thin film transistors each having a source and a drain forming a conduction path and a gate receiving a gate signal to control the conduction path.

35. (Withdrawn) A method for fabricating a semiconductor device for providing a pixel driving signal in an organic light emitting display device, comprising:

providing an insulation substrate;

forming on the insulation substrate a first amorphous silicon thin film transistor for providing the pixel driving signal to an organic light emitting diode;

forming on the insulation substrate a second amorphous silicon thin film transistor for transferring a data signal to control a switching function of the first amorphous silicon thin film transistor;

crystallizing the first and second amorphous silicon thin film transistors by performing a laser scan on the first and second amorphous silicon thin film transistor; and

transforming the first and second amorphous silicon thin film transistor into first and second polysilicon thin film transistors, respectively, by consummating the crystallizing step,

wherein the first and second polysilicon thin film transistors have characteristics substantially identical to each other.

36. (Withdrawn) The method of claim 35, wherein the forming the first amorphous silicon thin film transistor includes forming a gate electrode of the first

amorphous silicon thin film transistor in a direction substantially parallel to a laser scan direction, and the forming the second amorphous silicon thin film transistor includes forming a gate electrode of the second amorphous silicon thin film transistor in the direction substantially parallel to the laser scan direction.

37. (Withdrawn) The method of claim 36, wherein the forming the first amorphous silicon thin film transistor includes forming source and drain electrodes of the first amorphous silicon thin film transistor in a collinear direction substantially perpendicular to the laser scan direction, and the second amorphous silicon thin film transistor includes forming source and drain electrodes of the second amorphous silicon thin film transistor in the collinear direction substantially perpendicular to the laser scan direction.

38. (Withdrawn) The method of claim 35, wherein the forming the first amorphous silicon thin film transistor includes forming a gate electrode of the first amorphous silicon thin film transistor in a collinear direction substantially perpendicular to a laser scan direction, and the forming the second amorphous silicon thin film transistor includes forming a gate electrode of the second amorphous silicon thin film transistor in the collinear direction substantially perpendicular to the laser scan direction.

39. (Withdrawn) The method of claim 38, wherein the forming the first amorphous silicon thin film transistor includes forming source and drain electrodes of the first amorphous silicon thin film transistor in a direction substantially parallel to the laser

scan direction, and the second amorphous silicon thin film transistor includes forming source and drain electrodes of the second amorphous silicon thin film transistor in the direction substantially parallel to the laser scan direction.

40. (Withdrawn) The method of claim 35, further including forming a mask that forms a laser beam pattern on the insulation substrate.

41. (Withdrawn) The method of claim 40, further including exposing a pattern of the mask to the insulation substrate by zooming-out the pattern.